

## TO AUTHORIZE AN INCREASE IN THE LIMITS OF COST OF CERTAIN NAVAL VESSELS

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Mr. BUTLER, from the Committee on Naval Affairs, submitted the following

### REPORT

[To accompany H. R. 11282]

The Committee on Naval Affairs, to whom was referred the bill (H. R. 11282) to authorize an increase in the limits of cost of certain naval vessels, having had the same under consideration, report the same favorably without amendment and recommend that the bill do pass.

The purpose of this legislation is to authorize an increase in the limits of cost for the aircraft carriers *Lexington* and *Saratoga* from \$23,000,000 to \$34,000,000 each.

The *Lexington* and *Saratoga* were originally two of the six battle cruisers included in the building program of August 29, 1916. Contract for the *Lexington* was entered into with the Fore River Shipbuilding Corporation, Quincy, Mass., under date of April 26, 1917, and contract for the *Saratoga* with the New York Shipbuilding Corporation, Camden, N. J., under date of May 5, 1917. Practically no work was undertaken on these vessels during the war, due to the necessity for concentrating on vessels of other types for which the need was more immediately urgent and which could be expected to be completed in time for service in the war.

As a result of experience in the World War, the construction of these vessels was further delayed to permit a redesign mainly for the purpose of increasing the protection against gun and torpedo attack, which redesign materially increased the size of the vessels. As a result of these delays, the keels were not laid until January 2, 1921, for the *Lexington* and September 25, 1920, for the *Saratoga*. Work on the vessels was stopped February 8, 1922, following the signing of the treaty limiting naval armament. At that time a considerable portion of the hulls below the water line had been erected and the

reported progress was for the *Lexington* 33 per cent and for the *Saratoga* 34 per cent. The conversion of the vessels to airplane carriers, in accordance with the terms of the treaty, was authorized by the act of July 1, 1922.

The original contracts for the two battle cruisers were on the basis of cost plus 10 per cent. This was changed to cost plus a fixed fee for the *Lexington* under date of December 7, 1920, and for the *Saratoga* under date of October 11, 1920. The conversion to aircraft carriers was authorized by naming the particular vessels that were to be so converted. It was not practicable to negotiate a change in the form of contract to one providing for a fixed price, and the department therefore entered into supplementary contracts with the builders to complete the vessels as aircraft carriers, these contracts continuing the construction on the same basis as provided in the battle cruisers contracts, namely, cost plus the same fixed fee.

The original limit of cost on the *Lexington* and *Saratoga* on battle cruisers, as given in the act of August 29, 1916, was \$16,500,000 each, which limit was raised to \$19,000,000 by the act of March 4, 1917. In the case of both of these limits the general provision of law authorized an increase of 20 per cent if necessary to expedite construction. By the act of July 11, 1919, the limit of cost was fixed at \$23,000,000 each, which was the limit at the time the conversion to airplane carriers was authorized.

While the conversion of the vessels to airplane carriers materially reduced their displacement, the reduction was mainly in the battery and armor, and the amount of work required under the limit of cost was not greatly changed. No change was made in the limit of cost at the time the conversion was authorized, as it was expected that the vessels might be completed within the then limit of cost of \$23,000,000 each. This expectation was based on the belief that there would be a gradual adjustment downward in wages and material prices and that the bulk of the construction work would be carried out in a market approaching the pre-war level. Instead of a reduction in prices, however, costs of both labor and material have risen further, and it is apparent that the present limit of cost of the vessels will be greatly exceeded. The best information now available indicates that the limit of cost should be fixed at \$34,000,000 each.

The main part of the increase in the cost of construction is due to the same causes that have resulted in an increase in the cost of construction of other vessels building at private shipyards on cost-plus contracts and of vessels building at navy yards during the period since the war. These are, first, the increases in wages and prices of material, which now stand at about 1.8 as compared with the 1916 level; and, second, the increase in the overhead expenses due to the small amount of shipbuilding work which has caused shipbuilding plants to operate at much below their normal output. In addition to the above causes, which affected the cost of all vessels under construction during this period, the cost of these two vessels has been further increased, though to a lesser extent, by the cost of certain work undertaken for the vessels as battle cruisers and which could not be utilized in their construction as airplane carriers, and by the additional delay necessitated by the preparation of a new set of plans in connection with the conversion.

This proposed legislation was submitted to the Director of the Bureau of the Budget, as required by Circular No. 49 issued by that bureau, for information as to whether or not it came within the financial program of the President, and under date of January 2, 1925, the director advised the department "that this proposed legislation is not in conflict with his (the President's) financial program."

It is estimated that the expenditures on these vessels will reach the present limits of cost (\$23,000,000) some time during the coming summer.

Under the naval treaty of the Conference on the Limitation of Armament an aircraft carrier is defined as a vessel of war with a displacement in excess of 10,000 tons (10,160 metric tons) standard displacement designed for the specific and exclusive purpose of carrying aircraft. It must be so constructed that aircraft can be launched therefrom and landed thereon, and not designed and constructed for carrying a more powerful armament than that allowed to it under Article IX or Article X, as the case may be. (Ch. II. pt. 4.)

Articles VII, VIII, IX, and X of the naval treaty read as follows: Article VII says, "The total tonnage for aircraft carriers of each of the contracting powers shall not exceed in standard displacement, for the United States, 135,000 tons; for the British Empire, 135,000 tons; for France, 60,000 tons; for Italy, 60,000 tons; for Japan, 81,000 tons." Article VIII says, "The replacement of aircraft carriers shall be effected only as prescribed in Chapter II, Part III, provided, however, that all aircraft carrier tonnage in existence or building on November 12, 1921, shall be considered experimental, and may be replaced, within the total tonnage limit prescribed in Article VII, without regard to its age." Article IX says, "No aircraft carrier exceeding 27,000 tons standard displacement shall be acquired by, or constructed by, for or within the jurisdiction of any of the contracting parties. However, any of the contracting parties may, provided that its total tonnage allowance of aircraft carriers is not thereby exceeded, build not more than two aircraft carriers, each of a tonnage of not more than 33,000 tons standard displacement, and in order to effect economy, any of the contracting powers may use for this purpose any two of their ships, whether constructed or in course of construction which would otherwise be scrapped under the provisions of Article II. The armament of any aircraft carriers exceeding 27,000 tons standard displacement shall be in accordance with the requirements of Article X, except that the total number of guns to be carried in case any of such guns be of a caliber exceeding 6 inches (except antiaircraft guns and guns not exceeding 5 inches) shall not exceed eight."

Article X says, "No aircraft carrier of the contracting powers shall carry a gun with a caliber in excess of 8 inches. Without prejudice to the provisions of Article IX, if the armament carried includes guns exceeding 6 inches in caliber the total number of guns carried, except antiaircraft guns and guns not exceeding 5 inches, shall not exceed 10. If alternatively the armament contains no guns exceeding 6 inches in caliber, the number of guns is not limited. In either case the number of antiaircraft guns and of guns not exceeding 5 inches is not limited."

## AIRCRAFT CARRIERS BUILT

United States							British Empire							Japan						
Number of class	Type	Date completed	Surface displacement	Surface speed	Guns	Torpedo tubes	Number of class	Type	Date completed	Surface displacement	Surface speed	Guns	Torpedo tubes	Number of class	Type	Date completed	Surface displacement	Surface speed	Guns	Torpedo tubes
1	Langley	1922	12,700	13	4 5-inch		1	Argus	1918	14,450	20	2 4-inch; 4 4-inch A. A.		1	Hoshio	1922	9,500	25	4 5.5-inch; 2 3-inch A. A.	
							1	Hermes	1924	10,950	25	6 5.5-inch; 4 4-inch A. A.								
							1	Eagle <sup>1</sup>	1924	22,790	24	9 6-inch; 5 4-inch A. A.								
1			12,700				3			48,190				1			9,500			

## AIRCRAFT CARRIERS BUILDING

1	Lexington <sup>2</sup>	33,000				3 1	Furious	19,100	31	10 5.5-in.; 6 4-inch A. A.	1	Amagi <sup>5</sup>	27,000			
1	Saratoga <sup>2</sup>	33,000				3 2	Courageous and Glorious.	18,600 (each)	31	(*)	1	Kaga <sup>6</sup>	26,900			
2		66,000				3		56,300			2		53,900			

<sup>1</sup> Ex-battleship Almirante Cochrane.<sup>2</sup> Ex-battle cruisers converting to aircraft carriers as allowed by treaty.<sup>3</sup> Ex-cruisers to be reconstructed as aircraft carriers.<sup>4</sup> Present battery 4 15-inch, 18 4-inch, 2 3-inch A. A., 16 tubes. Battery when reconstructed unknown.<sup>5</sup> Ex-battle cruiser to be completed as an aircraft carrier.<sup>6</sup> Ex-battleship to be completed as an aircraft carrier.

The tonnage of aircraft carriers allowed by treaty is:

United States	135,000
British Empire	135,000
Japan	81,000